

AMENDMENTS TO THE SPECIFICATION

Before paragraph [0001] insert as a heading:

Field of the Invention

Replace paragraph [0001] with:

The invention concerns a local communications network between a ~~first~~ mobile station, such as a mobile telephone, and a ~~second~~ fixed station, especially a fixed-line telephone, ~~by means of~~ through a relay antenna and a data transmission link.

Before paragraph [0002] insert as a heading:

Background

Replace paragraph [0002] with:

In known systems of this type coaxial cables are used as the data transmission link. The use of coaxial cables has ~~the~~ a major problem in that construction of the installation is subject to strict constraints which entail, in general, the deployment of a group of receivers for the placement of the coaxial cables and ~~the~~ an operation test. In addition ~~the~~, testing a fixed station antenna necessitates the use of highly expensive materials which are difficult to transport. These known systems are furthermore subject to other kinds of constraints having to do with the physical installation of a fixed set with respect to the antenna which must be within a 30-meter perimeter and which depends on the power source as well as the presence of carriers in the area where the system is installed. As a result, known systems, especially owing to the use of coaxial cables, are difficult to put into operation and costly.

Before paragraph [0003] insert as a heading:

Summary of the Invention

Replace paragraph [0003] with:

The purpose of the invention is to propose a system ~~of the type defined above~~ which allows the problems of known systems, just described, to be eliminated.

Replace paragraph [0004] with:

In order to attain this objective, the local communications system according to the invention ~~is characterized in that the~~ includes a wireless data transmission link between the antenna and the fixed radio frequency station ~~is a wireless link~~.

Before paragraph [0005] insert as a heading:

Brief Description of Drawings

Replace paragraph [0006] with:

Figure 1 shows a general schematic for a communications system between a mobile telephone and a fixed-line telephone ~~by means of~~ through a mobile telephone network according to the invention.

Replace paragraph [0007] with:

Figure 2 is a functional schematic which illustrates the structure of the link device indicated by 6 ~~on in~~ Figure 1 of the mobile telephone network according to the invention.

Before paragraph [0014] insert as a heading:

Detailed Description

Replace paragraph [0014] with:

The invention ~~shall be~~ is described below as applied to a communications system between a mobile telephone 1 and a fixed-line telephone 2 ~~by means of~~ through a mobile telephony network usually called GSM (Global System Mobile) 3 and the fixed network 4.

Replace paragraph [0015] with:

Inside the GSM mobile telephony network 3, communication goes from a relay antenna 5 for communicating with the mobile telephone 1 ~~by means of~~ through a data transmission link 6 to a fixed assembly consisting of a radiocommunication station 7, which is a base transmission system usually referred to as BSC (Base Station Controller), and a communications center 9 called MSC (Mobile Switching Center). Of course, if the communication goes from the fixed-line telephone 2 to the mobile telephone 1, the signals flow in the opposite direction.

Replace paragraph [0016] with:

The relay antenna 5 may be of the multiband type, for example single band, dual-band, or tri-band, and receive and transmit frequency bands or channels of 900, 1800, or 2200 MHz. The antenna is supported by a mast 11 built for example on the roof of a building as shown in Figures 6 and 7.

Replace paragraph [0017] with:

In conformity with the invention, the link between the antenna 5 and the radiocommunication station 7 is realized in the form of a radio frequency link. The wireless transmission takes place between an electronic device built at the base of the antenna mast 11, enclosed in a housing 12 and an electronic equipment device enclosed in a housing 13 linked to the communications station 7. If the antenna is a multiband type, a housing 12 is built for each band. One station is provided for each ~~antenna-5~~ frequency band. The antenna housing 12 and station housing 13 are equipped with means of transmitting and receiving the signals to be transmitted. The specific transmission route of wireless signals is indicated by 14.

Replace paragraph [0018] with:

Referring to Figure 2, it may be seen that, on the antenna 5 side, enclosed in the antenna housing 12, the radio frequency link 6 includes, in succession, starting from the antenna, a high frequency demodulation module 16, an encoding module 17, an

analog/digital converter 18, a modulation and broadcast module 20, which broadcasts or receives the wireless signals on the transmission channel 14.